Specifications — MPX 866 A

Video

Routing
- RGB/VGA ..... 8 x 6 matrix
- S-video/composite video 6 x 6 matrix

Gain ..... Unity

Bandwidth
- RGB/VGA ..... 300 MHz (-3 dB), fully loaded
- S-video/composite video 150 MHz (-3 dB), fully loaded
  0 - 10 MHz: no more than +0.1 dB to -0.1 dB
  0 - 30 MHz: no more than +0.1 dB to -0.5 dB

Differential phase error ..... 1.0º at 3.58 MHz and 4.43 MHz

Differential gain error ..... 1.0% at 3.58 MHz and 4.43 MHz

Crosstalk
- RGB/VGA ..... <-50 dB @ 10 MHz, <-30 dB @ 100 MHz
- S-video/composite video -50 dB @ 5 MHz

Switching speed ..... 100 ms (max.)

Video input

Number/signal type
- RGB/VGA ..... 8 VGA-UXGA RGBHV, RGBS, RGsB, RsGsBs
- S-video/composite video Up to 4 S-video and 2 composite video
  or
  6 composite video

Connectors
- RGB/VGA ..... 8 female 15-pin HD
- S-video/composite video 4 x 2 female BNC for S-video or composite video (inputs 11 to 14) and
  2 x 1 female BNC for composite video or genlock only (inputs 9 and 10)

Nominal level ..... 1 Vp-p for Y of S-video and for composite video
0.7 Vp-p for RGB
0.3 Vp-p for C of S-video

Minimum/maximum levels
- RGB/VGA ..... Analog: 0.3 V to 1.5 Vp-p with no offset
- S-video/composite video Analog: 0.5 V to 2.0 Vp-p with no offset

Impedance ..... 75 ohms

Horizontal frequency (RGB) ..... 15 kHz to 145 kHz

Vertical frequency (RGB) ..... 30 Hz to 170 Hz

Return loss
- RGB/VGA ..... <-40 dB @ 5 MHz
- S-video/composite video <-30 dB @ 5 MHz

DC offset (max. allowable, S-video or composite video)
1.5 V

External sync (genlock, S-video or composite video)
0.3 V to 0.4 Vp-p

Video output

Number/signal type
- RGB/VGA ..... 6 VGA-UXGA RGBHV, RGBS, RGsB, RsGsBs, (follows input type)
- S-video/composite video 2 S-video, 2 S-video or composite video, and 2 composite video

Connectors
- RGB/VGA ..... 6 female 15-pin HD
- S-video/composite video 2 x 2 female BNC for S-video only (outputs 9 and 10)
  2 x 2 female BNC for S-video or composite video pass-through (outputs 11 and 12)
  2 x 1 female BNC for composite video only (outputs 7 and 8)

Nominal level	1 Vp-p for Y of S-video and for composite video 0.7 Vp-p for RGB 0.3 Vp-p for C of S-video
Minimum/maximum levels	
RGB/VGA	Analog: 0.3 V to 1.5 Vp-p with no offset (follows input)
S-video/composite video	Analog: 0.0 V to 2.0 Vp-p with no offset
Impedance	75 ohms
Return loss	
RGB/VGA	-40 dB @ 5 MHz
S-video/composite video	-30 dB @ 5 MHz
DC offset	
S-video/composite video	±5 mV with input at 0 offset
VGA	±10 mV with input at 0 offset
Switching type	
RGB/VGA	Triple-Action
S-video/composite video	Vertical interval

Sync

Input type (VGA group)	RGBHV, RGBS, RGsB, RsGsBs
Output type (VGA group)	RGBHV, RGBS, RGsB, RsGsBs (follows input)
Genlock connector	1 BNC female (video input 9)
Standards	NTSC 3.58, NTSC 4.43, PAL, SECAM
Input level	1.9 V to 5.0 Vp-p
Output level	TTL: 5.0 Vp-p, unterminated for RGBHV, RGBS
Input impedance	510 ohms
Output impedance	75 ohms
Max input voltage	5.0 Vp-p
Max. propagation delay	30 ns
Max. rise/fall time	4 ns
Polarity	Positive or negative (follows input)

Audio

Routing	14 x 6 stereo matrix
Gain	Unbalanced output: -6 dB; balanced output: 0 dB
Frequency response	20 Hz to 20 kHz, ±0.05 dB
THD + Noise	0.03% @ 1 kHz, 0.3% @ 20 kHz at nominal level
S/N	>85 dB, balanced, at maximum output (21 dBu) (unweighted)
Crosstalk	<-120 dB @ 1 kHz, fully loaded
Stereo channel separation	>80 dB @ 1 kHz
CMRR	>75 dB @ 20 Hz to 20 kHz
Volume range	-98 dB to 0 dB (volume numbers 0 to 64 in 1.0 dB steps)

NOTE *Full attenuation is volume level 0, -98 dB. The default is -0 dB, volume level 64.*

Audio input

Number/signal type	14 stereo, balanced/unbalanced
Connectors	(14) 3.5 mm captive screw connectors, 5 pole
Impedance	>25k ohms unbalanced, 50k ohms balanced, DC coupled
Nominal level	-10 dBV (316 mVrms)
Maximum level	+20 dBu, (balanced or unbalanced) at 1% THD+N
Input gain adjustment	–18 dB to +24 dB, adjustable per input by RS-232, Ethernet, or front panel

NOTE *0 dBu = 0.775 Vrms, 0 dBV = 1 Vrms, 0 dBV ≈ 2 dBu*

Specifications — MPX 866 A (continued)

Audio output

Number/signal type	6 stereo, balanced/unbalanced
Connectors	(6) 3.5 mm captive screw connectors, 5 pole
Impedance	50 ohms unbalanced, 100 ohms balanced
Gain error	±0.1 dB channel to channel
Maximum level (Hi-Z)	>+20 dBu, balanced or unbalanced at 1% THD+N

Control/remote — switcher

Serial host control port	(2) RS-232: 2 rear panel 3.5 mm captive screw connectors, 3 pole; 1 front panel 2.5 mm stereo mini jack (in parallel with the rear panel secondary port)
Baud rate and protocol	9600 baud; 8 data bits, 1 stop bit, no parity
Serial control pin configurations	Captive screw connectors: 1 = TX, 2 = RX, 3 = GND Mini stereo jack: tip = TX, ring = RX, sleeve = GND
Ethernet host control port	1 RJ-45 female connector
Ethernet data rate	10/100Base-T, half/full duplex with autodetect
Ethernet protocol	ARP, DHCP, ICMP (ping), TCP/IP, Telnet, HTTP, SMTP
Default settings	Link speed and duplex level = autodetected IP address = 192.168.254.254 Subnet mask = 255.255.0.0 Gateway = 0.0.0.0 DHCP = off
Web server	Up to 200 simultaneous sessions 1 MB nonvolatile user memory
Program control	Extron's control/configuration program for Windows® Extron's Simple Instruction Set (SIS™) Microsoft® Internet Explorer ver. 6 or higher, Telnet

General

Power	100 VAC to 240 VAC, 50/60 Hz, 15 watts, internal, autoswitchable
Temperature/humidity	Storage: -40 to +158 °F (-40 to +70 °C) / 10% to 90%, noncondensing Operating: +32 to +104 °F (0 to +40 °C) / 10% to 90%, noncondensing
Rack mount	Yes
Enclosure type	Metal
Enclosure dimensions	3.5" H x 17.0" W x 9.4" D (2U high, full rack wide) 8.9 cm H x 43.2 cm W x 23.9 cm D (Depth excludes connectors. Width excludes rack ears.)
Product weight	15 lbs (6.8 kg)
Shipping weight	25 lbs (12 kg)
DIM weight	TBD
Vibration	ISTA 1A in carton (International Safe Transit Association)
Listings	UL, CUL
Compliances	CE, FCC Class A, VCCI, AS/NZS, ICES
MTBF	30,000 hours
Warranty	3 years parts and labor

NOTE *All nominal levels are at ±10%.*

NOTE *Specifications are subject to change without notice.*

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